

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Previously Presented) A process for preparation of impact-resistant polystyrene from diene monomers and from styrene monomers via anionic polymerization, comprising
in a stage 1) a rubber solution is prepared from the diene monomers, or from the diene monomers and from the styrene monomers, using an alkali metal organyl compound as initiator and with concomitant use of a solvent, and then

2) in a stage 2), styrene monomer is added to the rubber solution, and the resultant mixture is polymerized anionically to give the impact-resistant polystyrene,
and where, after stage 1) and prior to stage 2), an organylaluminum compound and an alkali metal hydride are added to the rubber solution.

2. (Original) The process according to claim 1, wherein butadiene is used as diene monomer and styrene is used as styrene monomer.

3. (Previously Presented) The process according to claim 1, wherein the rubber has been selected from polybutadiene and styrene-butadiene block copolymers.

4. (Previously Presented) The process according to claim 1, wherein an organyllithium compound is used as alkali metal organyl compound.

5. (Previously Presented) The process according to claim 1, wherein triethylaluminum (TEA) or triisobutylaluminum (TIBA) or a mixture of these is used as organylaluminum compound.

6. (Previously Presented) The process according to claim 1, wherein sodium hydride is used as alkali metal hydride.

7. (Previously Presented) The process according to claim 1, wherein concomitant use is made of tetrahydrofuran during preparation of the rubber solution.

8. (Previously Presented) The process according to claim 1, wherein, prior to stage 2), the rubber solution is diluted with styrene monomer.

9. (Previously Presented) The process according to claim 1, wherein the polymerization is carried out in first stage 1) batchwise and in stage 2) continuously.

10. (Previously Presented) An impact-resistant polystyrene, obtainable by the process according to claim 1.

11. (Currently Amended) ~~Use of the impact-resistant polystyrene according to claim 10~~ A method for the production of moldings, of foils, of fibers, or of foams comprising utilizing the impact-resistant polystyrene according to claim 10, in the manufacture of moldings, foils, fibers or foams.

12. (Original) A molding, a foil, a fiber, or a foam composed of impact-resistant polystyrene according to claim 10.

13. (Previously Presented) The process according to claim 2, wherein the rubber has been selected from polybutadiene and styrene-butadiene block copolymers.

14. (Previously Presented) The process according to claim 2, wherein an organyllithium compound is used as alkali metal organyl compound.

15. (Previously Presented) The process according to claim 3, wherein an organyllithium compound is used as alkali metal organyl compound.

16. (Previously Presented) The process according to claim 2, wherein triethylaluminum (TEA) or triisobutylaluminum (TIBA) or a mixture of these is used as organylaluminum compound.

17. (Previously Presented) The process according to claim 3, wherein triethylaluminum (TEA) or triisobutylaluminum (TIBA) or a mixture of these is used as organylaluminum compound.

18. (Previously Presented) The process according to claim 4, wherein triethylaluminum (TEA) or triisobutylaluminum (TIBA) or a mixture of these is used as organylaluminum compound.

19. (Previously Presented) The process according to claim 2, wherein sodium hydride is used as alkali metal hydride.

20. (Previously Presented) The process according to claim 3, wherein sodium hydride is used as alkali metal hydride.

DISCUSSION OF THE AMENDMENTS

Claims 1, 2-10 and 13-20 were previously presented.

Claim 11 is currently amended.

Upon entry of the amendment claims 1-20 will be active.

The amendment to claim 11 is supported by claim 11 as originally presented and on page 14 of the specification.

No new matter has been added.